

THE BROAD COMPONENT OF HEII λ 4686 LINE IN NGC4151

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A series of spectral observations of the nucleus of the Seyfert galaxy NGC4151 were obtained with the TV scanner of the 6-meter telescope of SAO, Russia (Nazarova et al. 1997). The nucleus of the NGC4151 was observed repeatedly between 1986 and 1990 in the spectral range from 3900Å to 4950Å. The emission line fluxes were obtained by fitting multiple Gaussians. We parameterise the asymmetry of the HeII λ 4686 and H γ lines by the peak wavelength of the broad Gaussian fitted to the blend at \approx 4686Å and at \approx 4340Å. Significant changes have taken place in the asymmetry of the HeII line while there is only a gradual and small change in the asymmetry of H γ line. However, the change in the integrated line flux is exactly opposite. It seems possible that the asymmetric variations of the broad component of HeII line and nearly stable asymmetry in the broad component of H γ line during the period 1986–1990 might reflect the long-time variations in broad components emitted from HIL and LIL zones respectively. Work is partially supported by RBRF grant 97-02-17625.

References

Nazarova, L.S., Gondhalekar, P.M., Bochkarev, N.G., Shapovalova, A.I. (1997) *A&A*, in press